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Received - 2021-09-09 04:37:53 PM
Control Number - 52373
ItemNumber - 118

PROJECT NO. 52373

**REVIEW OF WHOLESALE ELECTRIC § BEFORE THE
MARKET DESIGN § PUBLIC UTILITY COMMISSION
§ OF TEXAS**

**COMMENTS OF ENCHANTED ROCK LLC RE: PUCT STAFF SEPTEMBER 2, 2021
MEMORANDUM**

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

Enchanted Rock LLC (“Enchanted Rock”) appreciates the opportunity to provide these comments in response to the Public Utility Commission of Texas (“Commission”) staff’s memorandum posing questions for comment on September 2, 2021.

I. INTRODUCTION

Enchanted Rock is a Houston-based microgrid developer, owner, and operator with over 200 dual-purpose microgrids throughout Texas. Microgrids are local energy assets that can provide electricity to a specific customer load, operating in both islanded and grid-connected modes. Enchanted Rock’s dual-purpose, natural gas microgrids not only provide long-duration industrial scale backup power to customers during grid outages, but also run to provide necessary energy back to the grid when our customers are on grid power.

II. EXECUTIVE SUMMARY

Given the proven reliability and resilience value of microgrids during all types of extreme weather and their essential role in the electric market, we provide the following select comments in response to the PUCT Staff’s questions and to inform discussion at the August 26 work session. Our major points may be summarized as follows:

- The Commission is correct to focus on market reforms that will trigger an adequate response from demand and supply *in advance* of an energy crisis.

- The Commission can facilitate broader non-residential deployment of distributed generators in support of grid reliability with targeted reforms to the ERCOT ERS program and utility planning and operational protocols.

We believe these answers can assist the Commission in its review of the wholesale market design to better support and facilitate a resilient grid for Texans.

III. SELECT COMMENTS

What changes should be made to non-residential load-side products, programs, or what programs should be developed to support reliability in the future?

ERS Program Reforms

The Emergency Response Service (ERS) product, which has been successful in engaging significant commercial and industrial customer participation, can be improved to better support ERCOT's grid reliability strategy going forward.

First, the Commission should consider lifting the budget cap on ERS. The budget cap, which has not been updated since the creation of the ERS product, may serve as an artificial limitation on the development of economic, dispatchable distributed generation. Adjustments to the cap will be especially important as the Commission seeks to extract greater reliability value from ERS resources, i.e., deployments in advance of an energy crisis.

Second, consistent with the Commission's interest in preventing load shedding events, Enchanted Rock proposes that all ERS resources, both 10-minute and 30-minute resources, be deployed during an Energy Emergency Alert (EEA) level 1 event, instead of waiting for an EEA level 2 event to call on faster-responding resources. During the recent Winter Storm, ERCOT initiated EEA 1 at 00:15 CST, then upgraded to EEA 2 at 1:07 CST, and finally called EEA 3 at 1:20 CST—the entire progression took slightly longer than an hour, while the upgrade from EEA 2 to EEA 3 took only 13 minutes.¹ When these types of energy emergencies occur, conditions deteriorate rapidly. As such, there is value to earlier deployment of ERS resources. In

¹ See page 26 of "The Timeline and Events of the February 2021 Texas Electric Grid Blackouts," July 2021, The University of Texas at Austin Energy Institute. <
[UTAustin \(2021\) EventsFebruary2021TexasBlackout \(002\)FINAL 07_12_21.pdf](#)>

recognition of the need for ERS resources to be deployed more frequently and for longer durations, the Commission should extend ERS deployment obligations beyond the current eight-hour obligation. Additionally, ERS resources that can respond faster, i.e., 10-minute ERS resources, should be compensated for such capabilities. This may be achieved by clearing the ERS market separately for 30-minute and 10-minute ERS resources with unique demand curves, or by creating a price adder for the 10-minute ERS resources.

Utility Planning and Operational Protocols

Utility planning and operational protocols must consider the unique capabilities and operating characteristics of distributed resources to maximize their value for grid reliability.

Enchanted Rock supports the Commission's interest in increasing the segmentation of the distribution grid. However, the value of such an effort is not limited to improvements in utility load shedding capabilities. The ability to segment distribution circuits to a more granular level can also help the utilities leverage existing distributed generation on their systems to island sections of a distribution feeder to be served temporarily in a microgrid configuration by local distributed generation. The utilities should also work to identify distribution circuits that have material export capability from distributed generation. In cases where a distribution feeder can provide material export MWs to the grid, utilities should keep the distribution feeder energized during a load shed event, even if there are no critical loads requiring protection, to avoid unnecessary load shedding impacts. The presented scenarios are currently not contemplated in utility planning and operations, as they have been designed with a focus on one-way flows of energy in mind. There may be opportunities to partially address these scenarios through recent legislation (HB2483), which allows the utilities to deploy emergency supply assets in support of grid restoration efforts. Any plans to allow utility-leased and operated assets to provide such services should also consider pathways for non-utility assets to provide those services.

Enchanted Rock would also like to follow up on our September 16 comments suggesting that interconnection processes can help facilitate rapid deployment of distributed generation. When connecting distributed generation that can operate in grid synchronous and islanded modes, utilities have applied various requirements to protect their equipment from potential scenarios that result in backfeed onto the system. In many cases, reverse power flow relaying has been sufficient for utility engineers. This solution is well-proven and economically efficient for

interconnection distributed generation. However, there are situations where utilities have required transfer trip protection, which requires a significantly greater investment in relaying and communications equipment. The utilities do not have a consistent process for determining which protection scheme is required for a similarly sized interconnection. Enchanted Rock proposes two solutions for providing greater transparency and efficiency to the interconnection process. First, it would help developers if there were clear, consistent interconnection criteria for distributed generation across the utilities. To this end, the Commission could call for an interconnection workshop for the utilities to establish best practices for facilitating distributed generation interconnections. Second, in recognition of the value of transfer trip protection for an entire distribution circuit, the Commission should consider allowing the utility to ratebase a portion of the transfer trip costs to be shared with benefitting utility customers and with future projects interconnecting on that circuit.

Thank you for your consideration. Enchanted Rock would be glad to participate in upcoming work sessions to continue this important discussion with the Commission.

Best Regards,

By: /s/ *Corey Amthor*

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